## Detection of 2J5 in Formalin-Fixed, Paraffin-Embedded, Mouse Tissue

## **Reagents:**

1X Automation Buffer
3% Hydrogen Peroxide
Antibody Diluent
Citrate Buffer
DAB Chromagen
Hematoxylin

## **Antibody Dilutions:**

Avidin Biotin Blocking Kit Vector Laboratories, Inc. Burlingame, CA 94010 www.vectorlabs.com 1-800-227-6666 Catalog: #SP-2001

Kit: Vector Elite Rabbit IgG ABC kit

Vector Laboratories, Inc. Burlingame, CA 94010 www.vectorlabs.com 1-800-227-6666 Catalog # PK 6101.

\*The Vector Rabbit Elite Kit contains solutions needed to make the secondary and label antibodies

Primary Antibody Rabbit anti-2J5

Antibody provided by: Dr. Darryl Zeldin, NIEHS

**Negative Control** 

Pre-immune provided by: Dr. Darryl Zeldin, NIEHS

## **Staining Procedure**

**Positive Control Tissue**: Heart, Pancreas ->Islets of Langerhans. Internal tissue positive control are autonomic ganglion.

**Stain Localization**: Cytoplasmic

Deparaffinize and hydrate slides through the following solutions.

| Xylene               | 2 times | 5 minutes |
|----------------------|---------|-----------|
| 100% EtOH            | 2 times | 3 minutes |
| 95% EtOH             | 2 times | 3 minutes |
| 1X Automation Buffer | 2 times | 5 minutes |

- 1. Quench endogenous peroxidase by placing slides in 3% hydrogen peroxide for 15 minutes.
- 2. Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each.
- 3. Perform Heat Induced Epitope Retrieval using a microwave oven.
  Unmasking Techniques
  Place a full rack of slides in a container containing 250ml of 1X citrate buffer.
  Microwave for 5 minutes at level 3.
  Cool for 1 minute (Add 50 mls citrate buffer to the container).
  Microwave again for 5 minutes at level 3. Temp.\_\_\_\_\_
  Remove the slides from the microwave oven and allow to cool 10 minutes at room temperature.

Rinse slides in distilled water for 3 min.

- 4. Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each.
- 5. Apply block from Vector Elite kit for 20 min. Exp Date\_\_\_\_\_ New Kit yes / no

DO NOT RINSE SLIDES. CONTINUE TO AVIDIN-BIOTIN BLOCK.

| DO NOT R                       | AINSE SLIDES. CONTINUI  | E TO AVIDIN-BIOTIN BLOC |
|--------------------------------|-------------------------|-------------------------|
| 6. Apply A                     | vidin/Biotin block      |                         |
| Lot#                           | Exp Date                | New Kit yes / no        |
| Apply avid                     | in block - 15 min @ RT. |                         |
| Quick rinse                    | e in 1X AB.             |                         |
| Apply bioti                    | in block - 15 min @ RT. |                         |
| Wipe exces                     | ss block.               |                         |
| $\stackrel{\bullet}{DO} NOT D$ | INCE CLIDEC WITH DHE    | EED DEEODE ADDING DDIM  |

DO NOT RINSE SLIDES WITH BUFFER BEFORE ADDING PRIMARY ANTIBODY.

| 7. Apply primary antibody 2J5 at a 1:2500 dilution and incubate for 1 hr.  |
|--|
| Lot# Aliquoted yes / no Date Aliquoted   |
| For negative control slides, use pre-immune at a 1:2500 dilution for 1 hr.   |
| Lot# Exp Date  |
| 8. Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each.   |
| 9. Apply secondary antibody from Vector Elite kit for 30 mins.   |
| 11. Apply Label antibody from Vector Elite Kit and incubate for 30 minutes.  Lot# Exp Date New Kit yes / no                            |
| 12. Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each.  |
| 13. Apply liquid Dako DAB Chromagen for 6 minutes in the dark. (Add 1 drop of DAB per ml of substrate)  Lot# Exp Date New Kit yes / no |
| 14. Rinse in tap water 3 minutes.  |
| 15. Counterstain with Modified Harris Hematoxylin for 30 seconds.  |
| 16. Rinse in tap water until water is clear.   |
| 17. Place slides in 1X Automation buffer for 1 minute with gentle agitation to blue slide  |
| 18. Dehydrate through the following solutions.   |
| 95% alcohol 1 times 3 mins   |
| 100% alcohol 3 times 3 mins  |
| Xylene 2 times 5 mins  |

19. Coverslip

Updated 10/28/03